

### APPENDIX C

#### **"MARKED UP" PARAGRAPHS ILLUSTRATING THE AMENDMENTS MADE TO THE SPECIFICATION OF 09/685,189 WITH ENTRY OF THIS AMENDMENT**

insertions are indicated by double underlining, deletions are indicated by ~~striketrough~~

**A. The paragraph on page 1 entitled "Cross Reference to Related Applications":**

This application is a continuation-in-part application of and claims the benefit of and priority to U.S. Patent Application Serial No. 09/445,483415,183, filed October 7, 1999, the disclosure of which is incorporated herein by reference in its entirety for all purposes.

**B. The paragraph at page 3, lines 14-32:**

The invention also includes an isolated or recombinant nucleic acid, comprising a polynucleotide sequence encoding a polypeptide, wherein the polypeptide comprises the amino acid sequence: CDLPQTHSLG-X<sub>11</sub>-X<sub>12</sub>-RA-X<sub>15</sub>-X<sub>16</sub>-LL-X<sub>19</sub>-QM-X<sub>22</sub>-R-X<sub>24</sub>-S-X<sub>26</sub>-FSCLKDR-X<sub>34</sub>-DFG-X<sub>38</sub>-P-X<sub>40</sub>-EEFD-X<sub>45</sub>-X<sub>46</sub>-X<sub>47</sub>-FQ-X<sub>50</sub>-X<sub>51</sub>-QAI-X<sub>55</sub>-X<sub>56</sub>-X<sub>57</sub>-HE-X<sub>60</sub>-X<sub>61</sub>-QQTFN-X<sub>67</sub>-FSTK-X<sub>72</sub>-SS-X<sub>75</sub>-X<sub>76</sub>-W-X<sub>78</sub>-X<sub>79</sub>-X<sub>80</sub>-LL-X<sub>83</sub>-K-X<sub>85</sub>-X<sub>86</sub>-T-X<sub>88</sub>-L-X<sub>90</sub>-QQLN-X<sub>95</sub>-LEACV-X<sub>101</sub>-Q-X<sub>103</sub>-V-X<sub>105</sub>-X<sub>106</sub>-X<sub>107</sub>-X<sub>108</sub>-TPLMN-X<sub>114</sub>-D-X<sub>116</sub>-ILAV-X<sub>121</sub>-KY-X<sub>124</sub>-QRITLYL-X<sub>132</sub>-E-X<sub>134</sub>-KYSPC-X<sub>140</sub>-WEVVRAEIMRSFSFSTNLQKRLRRKE (SEQ ID NO:71), or a conservatively substituted variation thereof, where X<sub>11</sub> is N or D; X<sub>12</sub> is R, S, or K; X<sub>15</sub> is L or M; X<sub>16</sub> is I, M, or V; X<sub>19</sub> is A or G; X<sub>22</sub> is G or R; X<sub>24</sub> is I or T; X<sub>26</sub> is P or H; X<sub>34</sub> is H, Y or Q; X<sub>38</sub> is F or L; X<sub>40</sub> is Q or R; X<sub>45</sub> is G or S; X<sub>46</sub> is N or H; X<sub>47</sub> is Q or R; X<sub>50</sub> is K or R; X<sub>51</sub> is A or T; X<sub>55</sub> is S or F; X<sub>56</sub> is V or A; X<sub>57</sub> is L or F; X<sub>60</sub> is M or I; X<sub>61</sub> is I or M; X<sub>67</sub> is L or F; X<sub>72</sub> is D or N; X<sub>75</sub> is A or V; X<sub>76</sub> is A or T; X<sub>78</sub> is E or D; X<sub>79</sub> is Q or E; X<sub>80</sub> is S, R, T, or N; X<sub>83</sub> is E or D; X<sub>85</sub> is F or L; X<sub>86</sub> is S or Y; X<sub>88</sub> is E or G; X<sub>90</sub> is Y, H, N; X<sub>95</sub> is D, E, or N; X<sub>101</sub> is I, M, or V; X<sub>103</sub> is E or G; X<sub>105</sub> is G or W; X<sub>106</sub> is V or M; X<sub>107</sub> is E, G, or K; X<sub>108</sub> is E or G; X<sub>114</sub> is V, E, or G; X<sub>116</sub> is S or P; X<sub>121</sub> is K or R; X<sub>124</sub> is F or L; X<sub>132</sub> is T, I, or M; X<sub>134</sub> is K or R; and X<sub>140</sub> is A or S. Each of the single letters of this amino acid sequence

represents a particular amino acid residue according to standard practice known to those of ordinary skill in the art.

C. The paragraph at page 22, line 22- page 23, line 10:

The invention also includes an isolated or recombinant nucleic acid comprising a polynucleotide sequence encoding a polypeptide, wherein the polypeptide comprises the amino acid sequence: CDLPQTHSLG-X<sub>11</sub>-X<sub>12</sub>-RA-X<sub>15</sub>-X<sub>16</sub>-LL-X<sub>19</sub>-QM-X<sub>22</sub>-R-X<sub>24</sub>-S-X<sub>26</sub>-FSCLKDR-X<sub>34</sub>-DFG-X<sub>38</sub>-P-X<sub>40</sub>-EEFD-X<sub>45</sub>-X<sub>46</sub>-X<sub>47</sub>-FQ-X<sub>50</sub>-X<sub>51</sub>-QAI-X<sub>55</sub>-X<sub>56</sub>-X<sub>57</sub>-HE-X<sub>60</sub>-X<sub>61</sub>-QQTFN-X<sub>67</sub>-FSTK-X<sub>72</sub>-SS-X<sub>75</sub>-X<sub>76</sub>-W-X<sub>78</sub>-X<sub>79</sub>-X<sub>80</sub>-LL-X<sub>83</sub>-K-X<sub>85</sub>-X<sub>86</sub>-T-X<sub>88</sub>-L-X<sub>90</sub>-QQLN-X<sub>95</sub>-LEACV-X<sub>101</sub>-Q-X<sub>103</sub>-V-X<sub>105</sub>-X<sub>106</sub>-X<sub>107</sub>-X<sub>108</sub>-TPLMN-X<sub>114</sub>-D-X<sub>116</sub>-ILAV-X<sub>121</sub>-KY-X<sub>124</sub>-QRITLYL-X<sub>132</sub>-E-X<sub>134</sub>-KYSPC-X<sub>140</sub>-WEVVRAEIMRSFSFSTNLQKRLRRKE (SEQ ID NO:71), or a conservatively substituted variation thereof, where X<sub>11</sub> is N or D; X<sub>12</sub> is R, S, or K; X<sub>15</sub> is L or M; X<sub>16</sub> is I, M, or V; X<sub>19</sub> is A or G; X<sub>22</sub> is G or R; X<sub>24</sub> is I or T; X<sub>26</sub> is P or H; X<sub>34</sub> is H, Y or Q; X<sub>38</sub> is F or L; X<sub>40</sub> is Q or R; X<sub>45</sub> is G or S; X<sub>46</sub> is N or H; X<sub>47</sub> is Q or R; X<sub>50</sub> is K or R; X<sub>51</sub> is A or T; X<sub>55</sub> is S or F; X<sub>56</sub> is V or A; X<sub>57</sub> is L or F; X<sub>60</sub> is M or I; X<sub>61</sub> is I or M; X<sub>67</sub> is L or F; X<sub>72</sub> is D or N; X<sub>75</sub> is A or V; X<sub>76</sub> is A or T; X<sub>78</sub> is E or D; X<sub>79</sub> is Q or E; X<sub>80</sub> is S, R, T, or N; X<sub>83</sub> is E or D; X<sub>85</sub> is F or L; X<sub>86</sub> is S or Y; X<sub>88</sub> is E or G; X<sub>90</sub> is Y, H, N; X<sub>95</sub> is D, E, or N; X<sub>101</sub> is I, M, or V; X<sub>103</sub> is E or G; X<sub>105</sub> is G or W; X<sub>106</sub> is V or M; X<sub>107</sub> is E, G, or K; X<sub>108</sub> is E or G; X<sub>114</sub> is V, E, or G; X<sub>116</sub> is S or P; X<sub>121</sub> is K or R; X<sub>124</sub> is F or L; X<sub>132</sub> is T, I, or M; X<sub>134</sub> is K or R; and X<sub>140</sub> is A or S. Each of the single letters of this amino acid sequence represents a particular amino acid residue according to standard practice known to those of ordinary skill in the art. Such polypeptides having an antiproliferative activity in the human Daudi cell line-based assay (e.g., at least about 8.3x10<sup>6</sup> units/mg) and/or an antiviral activities in a human WISH cell/EMCV-based assay (at least about 2.1x10<sup>7</sup> units/mg).

D. The paragraph at page 43, lines 8-17:

In a further example, if four conservative substitutions were localized in the region corresponding to amino acid residues 141-166 of SEQ ID NO:36, examples of conservatively substituted variations of this region,

WEVVR AEIMR SFSFS TNLQK RLRRKE include:

WEVVR SEIMR SFSYS TNLQR RLRRKD (SEQ ID NO:87) and

WELVR AEIVR SFSFS TNLNK RLRRKE (SEQ ID NO:88) and the like, in accordance with the conservative substitutions listed in Table 2 (in the above example, conservative substitutions are underlined). Listing of a protein sequence herein, in conjunction with the above substitution table, provides an express listing of all conservatively substituted proteins.

E. The paragraph at page 80, lines 23-29:

As an example, if four conservative substitutions were localized in the subsequence corresponding to amino acids 141-166 of SEQ ID NO:71, examples of conservatively substituted variations of this subsequence,

WEVVR AEIMR SFSFS TNLQK RLRRKE, include:

WEVVR SEIMR SFSYS TNLQR RLRRKD (SEQ ID NO:87) and

WELVR AEIVR SFSFS TNLNK RLRRKE, (SEQ ID NO:88) and the like, where the conservative substitutions are underlined.